

production foregone is irretrievable, but the action is not irreversible. If the use changes, it is possible to resume production.

The Proposed Action would not have irreversible impacts because future options for using this site would remain possible. A future decommissioning process could restore the site for alternative uses, ranging from natural open space to urban development. No loss of future options would occur.

The primary irretrievable impacts of the Proposed Action would involve the use of energy, labor, materials and funds, and the conversion of some lands from a natural condition through the construction of buildings and facilities. Irretrievable impacts would occur as a result of construction, facility operation and maintenance activities. Direct losses of biological productivity and the use of natural resources from these impacts would be inconsequential, and would be offset by the mission of the NWTC to improve energy efficiency and renewable energy technology and by the generation of renewable power by turbines, distributed energy systems, and other facilities at the NWTC and elsewhere.

4.15 THE RELATIONSHIP BETWEEN LOCAL SHORT-TERM USES OF THE HUMAN ENVIRONMENT AND THE MAINTENANCE AND ENHANCEMENT OF LONG-TERM PRODUCTIVITY

The following discussion addresses the commitment of resources associated with the Proposed Action relative to the loss of long-term productivity associated with these commitments.

The Proposed Action would commit resources in the form of energy, labor, materials, and funds over 20 years or more. The justification for these commitments at this time is described in Section 1.1 Purpose and Need. Long-term productivity associated with the site relates to agricultural value for livestock grazing, biological value as habitat and open space values associated with aesthetic quality and recreation. The Proposed Action would involve the use of lands where these values have already been compromised by facility development and operations so any losses would be incremental and insignificant and off-set by the potential for the Proposed Action to improve energy efficiency and harness renewable energy resources. Improved efficiency and increased reliance on renewable energy resources could substantially reduce reliance on coal, oil, and nuclear fuels and reduce resource productivity losses in resource extraction areas.

No long-term risks to public health and safety would be created by the Proposed Action.

4.16 UNAVOIDABLE ADVERSE IMPACTS

There would be no significant unavoidable adverse impacts of the short-term or long-term components of the Proposed Action. However, some adverse impacts would be expected. These impacts and corresponding mitigation measures are described throughout Chapter 4 and are listed in the Summary of this document.